

Date: Wednesday, 26/11/2008 11:18:58 AM
 User: Chantal Lavoie

Process Sheet

Customer	: CU-DAR001 Dart Helicopters Services			Drawing Name	: BRACKET ASSEMBLY		
Job Number	: 42190			Part Number	: D3121143		
Estimate Number	: 10279			Drawing Number	: D3121 REV E		
P.O. Number	:			Project Number	: N/A		
This Issue	: 26/11/2008	S.O. No.	:	Drawing Revision	: E		
Prsht Rev.	: NC			Material	:		
First Issue	: 22/09/2008	Type	: MACHINED PARTS	Due Date	: 25/10/2008		
Previous Run	: 40343			Qty:	25	Um:	Each
Written By	:						
Checked & Approved By	:						
Comment	: Est Rev:Pick:A 04.02.18 New issue KJ/DS Est Rev:B ECN 1060 07-11-12 DD verified by:EC Est Rev:C New Dimensions for Blank Size 08-07-23 JLM Verified By:EC						

Additional Product

Job Number:



Seq. #:	Machine Or Operation:	Description :
1.0	M174B1250X02000	17-4 SS Bar 1.250 x 2.00
Comment: Qty.: 0.3864 f(s)/Unit Total : 9.6600 f(s) Material: 17-4 SS Bar per AMS 5604/5643 (M17-4-B1.250x02.000) Identify for D3121-113 Batch: <i>m109021.</i> <i>MF 08/09/24</i>		
2.0	BAND SAW	BAND SAW
Comment: BAND SAW Cut blanks: (1.000" x 2.000") 4.425" long <i>MF 08/09/24</i>		
3.0	HAAS1	HAAS CNC VERTICAL MACHINING #1
Comment: HAAS CNC VERTICAL MACHINING #1 1-Machine D3121-113 as per Folio FA330 and Dwg D3121 Identify as D3121-113 2-Deburr 3-Scribe batch number <i>JUL 08/11/24</i>		

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Job Number: 42190		Part Number: D3121143
Job Number:		
Seq. #:	Machine Or Operation:	Description :
4.0	QC2	INSPECT PARTS AS THEY COME OFF MACHINE
Comment: INSPECT PARTS AS THEY COME OFF MACHINE		9/11/2008 (25)
5.0	QC8	SECOND CHECK
Comment: SECOND CHECK		5.A 08/11/24
6.0	D312121	Bolt
Comment: Qty.: 2.0000 Each(s)/Unit Total : 50.0000 Each(s)		
Pick:		
Qty Part Number Description Batch		
2 D3121-21 Bolt B42201		
7.0	D3121241	Bearing Assembly
Comment: Qty.: 2.0000 Each(s)/Unit Total : 50.0000 Each(s)		
Pick:		
Qty Part Number Description Batch		
2 D3121-241 Bearing Ass B70177		
8.0	SMALL FAB 1	SMALL & MEDIUM FAB RESOURCE 1
Comment: SMALL & MEDIUM FAB RESOURCE 1		
Assemble D3121-143 as per Dwg D3121.		
9.0	QC5	INSPECT WORK TO CURRENT STEP
Comment: INSPECT WORK TO CURRENT STEP		8/12/02 (25)
10.0	PACKAGING 1	PACKAGING RESOURCE #1
Comment: PACKAGING RESOURCE #1		
Identify and Stock		
Location: ST 233		8/12/03 (25)

Date: Wednesday, 26/11/2008 11:18:58 AM
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Process Sheet

Customer: CU-DAR001 Dart Helicopters Services Drawing Name: BRACKET ASSEMBLY

Job Number: 42190 Part Number: D3121143

Job Number:



Seq. #:	Machine Or Operation:	Description :
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11.0	QC21	FINAL INSPECTION/W/O RELEASE
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08/12/04 HJ

Comment: FINAL INSPECTION/W/O RELEASE

Job Completion



u 08.12.04

Date: Monday, 22/09/2008 2:00:30 PM
 User: Linda Lacelle

Process Sheet

Customer	CU-DAR001 Dart Helicopters Services		Drawing Name	BRACKET ASSEMBLY	
Job Number	42190		Part Number	D3121143	
Estimate Number	10279		Drawing Number	D3121 REV E	
P.O. Number			Project Number	N/A	
This Issue	22/09/2008	S.O. No.	Drawing Revision	E	
Prsht Rev.	NC		Material		
First Issue	/ /	Type	Due Date	25/10/2008	Qty: 25 Um: Each
Previous Run	40343				
Written By					
Checked & Approved By					
Comment	Est Rev:Pick:A 04.02.18 New issue KJ/DS Est Rev:B ECN 1060 07-11-12 DD verified by:EC Est Rev:C New Dimensions for Blank Size 08-07-23 JLM Verified By:EC				

Additional Product

Job Number:



Seq. #:	Machine Or Operation:	Description :	
1.0	M174B1250X02000	17-4 SS Bar 1.250 x 2.00	(25)
		Comment: Qty.: 0.3864 f(s)/Unit Total: 9.6600 f(s) Material: 17-4 SS Bar per AMS 5604/5643 (M17-4-B1.250x02.000) Identify for D3121-113 Batch: 01109021	
2.0	BAND SAW	BAND SAW	(25)
		Comment: BAND SAW Cut blanks: (1.000" x 2.000") 4.425" long	
3.0	HAAS1	HAAS CNC VERTICAL MACHINING #1	(25)
		Comment: HAAS CNC VERTICAL MACHINING #1 1-Machine D3121-113 as per Folio FA330 and Dwg D3121 Identify as D3121-113	
		2-Deburr	
		3-Scribe batch number	

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: D3121-143 PAR #: N/P Fault Category: Prod. Machine NCR: Yes No DQA: 11 Date: 08-12-04
 Resolution: Scrap Disposition: Scrap QA: N/C Closed: 7/1 Date: 08/12/04

NCR: 42190		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			
08/11/23	3	2 pieces scrap. the drill broke inside the the sole, and the second part the tip broke. Q.C. process/operat. c.→ drill bit just broke ??	<u>08/11/23</u>	serge and destroy and replace Qty 2 Batch: <u>17109021</u>	<u>08/11/23</u>	<u>DR</u> 08/11/23	<u>08/11/23</u>	<u>08/11/23</u>

NOTE: Date & initial all entries

Date: Monday, 22/09/2008 2:00:30 PM
User: Linda Lacelle

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: BRACKET ASSEMBLY

Job Number: 42190

Part Number: D3121143

Job Number:



Seq. #: Machine Or Operation:

Description :

4.0 RG 862



Receive & Inspect for first damage
Ensure C/S is attached

08/11/24

(25)

Comment: INSPECT PARTS AS THEY COME OFF MACHINE

5.0

QC5

SECOND CHECK



Comment: SECOND CHECK

Inspect level 5

P.A 08/11/24

6.0 D312121

Bolt



Comment: Qty.: 2.0000 Each(s)/Unit Total : 50.0000 Each(s)

Pick:

Qty Part Number

Description Batch

2 D3121-21

Bolt B42201

7.0 D3121241

Bearing Assembly



Comment: Qty.: 2.0000 Each(s)/Unit Total : 50.0000 Each(s)

Pick:

Qty Part Number

Description Batch

2 D3121-241

Bearing Ass B42177

8.0 SMALL FAB 1

SMALL & MEDIUM FAB RESOURCE 1



Comment: SMALL & MEDIUM FAB RESOURCE 1

Assemble D3121-143 as per Dwg D3121.

9.0 QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

10.0 PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and Stock

Location: ST 233

ST 233

AS 08/12/03 (25)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____
 Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)					
DATE	STEP	Description of NC Section A	Corrective Action Section B		Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng			

NOTE: Date & initial all entries

Date: Monday, 22/09/2008 2:00:30 PM
User: Linda Lacelle

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: BRACKET ASSEMBLY

Job Number: 42190

Part Number: D3121143

Job Number:



Seq. #:

Machine Or Operation:

Description :

11.0

QC21

FINAL INSPECTION/W/O RELEASE



Comment: FINAL INSPECTION/W/O RELEASE

Job Completion



W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____
 Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)							
DATE	STEP	Description of NC Section A	Corrective Action		Section B	Sign & Date	Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng					

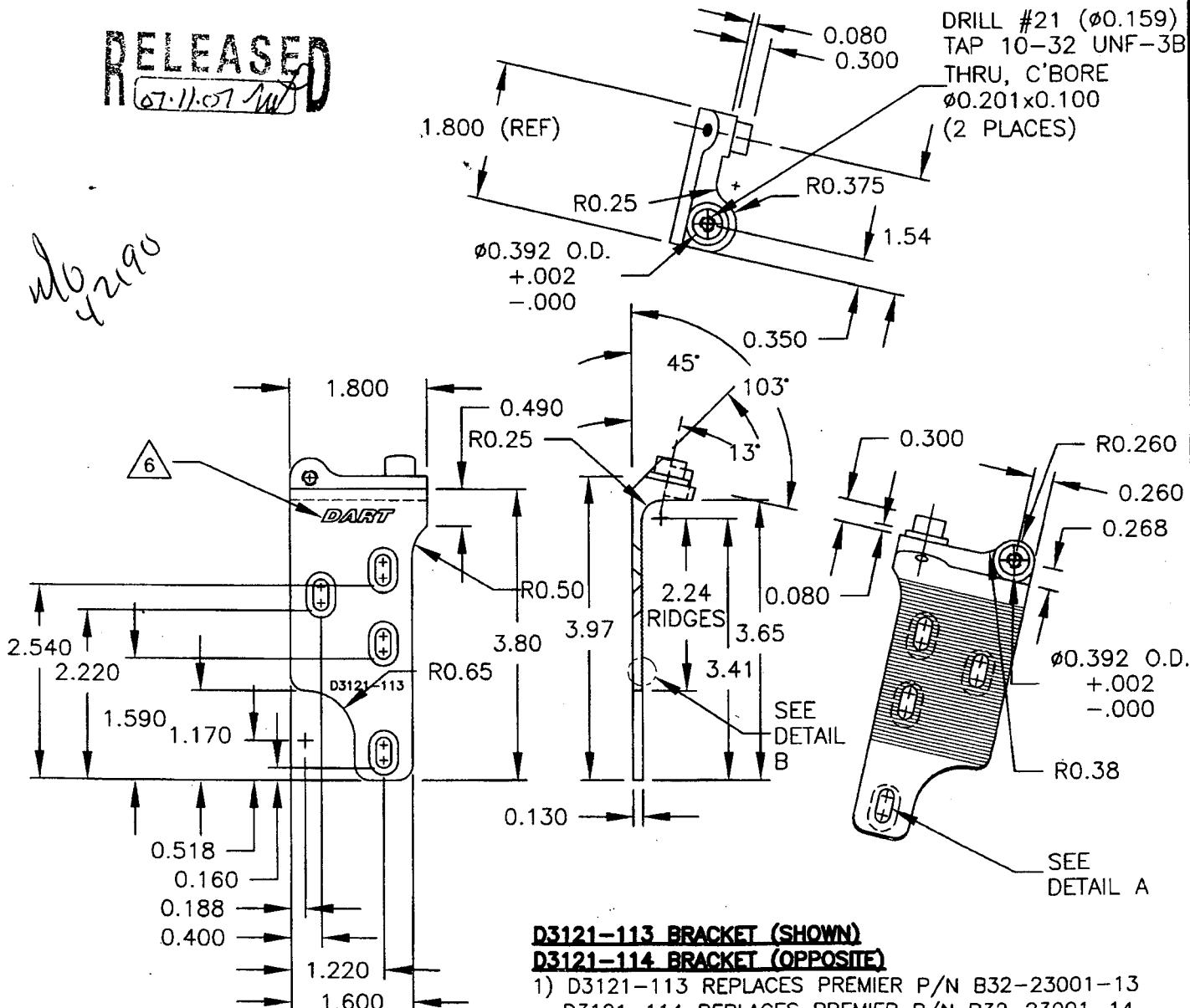
NOTE: Date & initial all entries

DART

DESIGN	DRAWN BY	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA
CHECKED	APPROVED	DRAWING NO. D3121
DATE		REV. E SHEET 8 OF 10 TITLE SCALE 1:2

RELEASED
07.11.07 SW

MB 12/95



D3121-113 BRACKET (SHOWN)

D3121-114 BRACKET (OPPOSITE)

- 1) D3121-113 REPLACES PREMIER P/N B32-23001-13
D3121-114 REPLACES PREMIER P/N B32-23001-14
- 2) MATERIAL: 17-4 SS PER AMS 5604/5643
(REF DART SPEC. M17-4-B)
MIN ULTIMATE TENSILE STRENGTH = 150 ksi
MIN YIELD TENSILE STRENGTH = 100 ksi
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES
- 5) BREAK ALL SHARP EDGES 0.005 TO 0.015
- 6) ENGRAVE DART P/N & LOGO IN AREAS SHOWN
- 7) HOLE IN SPIGOT TO BE CONCENTRIC WITHIN 0.005

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DART AEROSPACE LTD	Work Order:	42190
Description: BRACKET	Part Number:	D3121-173
Inspection Dwg: D3121 Rev: E		Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST

X First Article X Prototype

have as

WFO 43486

Measured by:		Audited by:		Prototype Approval:	
Date:	08/11/24	Date:		Date:	

Rev	Date	Change	Revised by	Approved
A		New issue	KJ/JLM	

DART AEROSPACE LTD

Work Order: 43486

Description: Bracket

Part Number: D3121-113

Inspection Dwg: D3121

Rev: E

Page 1 of 2

FIRST ARTICLE INSPECTION CHECKLIST

 First Article Prototype

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
0.080	+/-0.010	.079	—			
0.300	+/-0.010	.298	—			
R0.375	+/-0.010	R.375	—			
1.54	+/-0.030	1.539	—			
0.350	+/-0.010	.353	—			
R0.25	+/-0.030	R.250	—			
Ø0.392	+0.002/-0.000	Ø.3933	—			
Ø0.201	+0.005/-0.000	Ø.201	—			
2.540	+/-0.010	2.541	—			
1.590	+/-0.010	1.590	—			
0.160	+/-0.010	.160	—			
0.400	+/-0.010	.396	—			
1.220	+/-0.010	1.216	—			
1.600	+/-0.010	1.603	—			
3.80	+/-0.030	3.800	—			
1.800	+/-0.010	1.801	—			
R0.50	+/-0.030	R.500	—			
0.130	+/-0.010	.130	—			
3.41	+/-0.030	3.385	—			
3.65	+/-0.030	3.625	—			
2.24	+/-0.030	2.210	—			
45°	+/-0.1°	45°	—			
R0.25	+/-0.030	R.250	—			
3.97	+/-0.030	3.972	—			
R0.38	+/-0.030	R.380	—			
Ø0.392	+0.002/-0.000	Ø.3933	—			
Ø0.201	+0.005/-0.000	Ø.201	—			
0.268	+/-0.010	.268	—			
R0.260	+/-0.010	R.260	—			
0.080	+/-0.010	.077	—			
0.300	+/-0.010	.302	—			
0.381	+/-0.010	.380	—			
0.201	+/-0.010	.201	—			
0.580	+/-0.010	.580	—			

DART AEROSPACE LTD	Work Order:	43480
Description: Bracket	Part Number:	D3121-113
Inspection Dwg: D3121 Rev: E		Page 2 of 2

FIRST ARTICLE INSPECTION CHECKLIST

X First Article Prototype

Measured by:	<i>JNL</i>	Audited by:	<i>B.A</i>	Prototype Approval:	N/A
Date:	08/11/19	Date:	08/11/24	Date:	N/A

Date:	08/11/16	Revised by	Approved
Rev	Date	Change	
A	03.12.08	New Issue P/O D3121-143	KJ/RF
B	04.05.05	Dimensions changed/re-arranged per Dwg revision	KJ/JLM
C	06.06.14	Dwg Rev. updated	KJ/JLM
D	08.01.16	Dimensions updated per Dwg Rev. E	KJ/EC/DD <i>[initials]</i> <i>[initials]</i>